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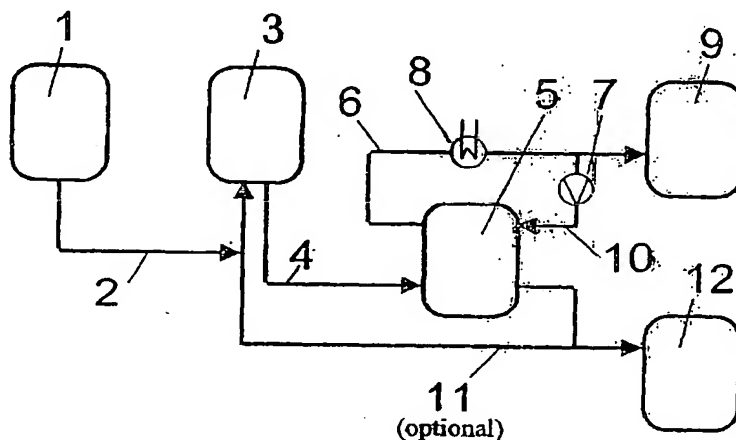
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[Fortsetzung auf der nächsten Seite]

(54) Title: (METH)ACRYLIC ACID CRYSTAL AND METHOD FOR THE PRODUCTION AND PURIFICATION OF AQUE-
OUS (METH)ACRYLIC ACID

(54) Bezeichnung: (METH)ACRYLSÄUREKRISTALL UND VERFAHREN ZUR HERSTELLUNG UND AUFRÄINIGUNG
VON WÄSSRIGER (METH)ACRYLSÄURE



(57) Abstract: The invention relates to a method for the purification of a composition comprising (meth)acrylic acid, at least one impurity and water, wherein the composition has a water content ranging from 0.55 to 90, in relation to said composition, in a purified phase, containing (meth)acrylic acid and at least one impurity, whereby in the purified phase the amount of the at least one impurity is less than 7 wt. % in relation to the methacrylic acid in the purified phase, consisting of one stage. The inventive method comprises the following steps: a) (meth)acrylic acid is crystallized out of the composition, forming a solution containing a mother liquor and (meth)acrylic crystals; b) (meth)acrylic acid crystals are separated from the mother liquor; c) at least one part of the separated (meth)acrylic acid crystals is melted to form a melt; and d) one part of the melt is returned to step a) or b). The non-returned part of the melt is provided in the form of a separated (meth)acrylic acid. The invention also relates to a device for the production of pure (meth)acrylic acid, a device for the polymerization of (meth)acrylic acid, (meth)acrylic acid or polymers which can be obtained from said methods, the use thereof and substances containing said (meth)acrylic acid or polymers.

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Abstract

The present invention relates to processes for purifying a composition containing
5 (meth)acrylic acid, at least one impurity and water, wherein the composition has a
water content in the range of 0.55 to 90, based on the composition, to form a purified
phase containing (meth)acrylic acid and at least one impurity, wherein, in the purified
phase, the quantity of at least one impurity is less than 7% by weight, based on
(meth)acrylic acid in the purified phase.